### STATEMENT OF WORK

# Irrigation Water Conveyance – Corrugated Metal Pipeline (780) Wyoming

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

### **DESIGN**

## **Deliverables:**

- 1. Design Surveys
  - A. Profile along centerline of conveyance.
  - B. Cross sections at critical locations.
  - C. Detailed topography at structure locations.
  - D. Pertinent water surface elevations.
  - E. Critical elevation of area to be served.
  - F. Soils investigation.
- 2. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
  - A. Practice purpose(s) as identified in the conservation plan
  - B. List of required permits to be obtained by the client
  - C. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A Engineering Activities Affecting Utilities 503.00 through 503.06)
  - D. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
    - i. Capacity
    - ii. Hydraulics and Appurtenance Design
    - iii. Trench and Backfill Requirements
    - iv. Materials
      - a. Structure design
      - b. Pipeline Design(consideration for internal design and external loading)
    - v. Vegetation
    - vi. Quantity computations
- 3. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
  - A. Overall plan view of conveyance and area to be served.
  - B. Location map.
  - C. Plan and profile showing design grade.
  - D. Structural plans and section views.
  - E. Location and size of appurtenances.
  - F. Conveyance diameter and class or rating.
  - G. Details of installation requirements.
  - H. Table of quantities.
- 4. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
- 5. Operation and Maintenance Plan
- 6. Certification that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03 (a) (3)).
- 7. Design modifications during installation as required.

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### **INSTALLATION**

## **Deliverables**

- 1. Pre Installation conference with client and contractor.
- 2. Verification that client has obtained required permits.
- 3. Staking and layout according to plans and specifications including applicable layout notes.
  - A. Centerline alignment stakes with offset grade stakes.
  - B. Appurtenance locations.
  - C. Structure layout, alignment and reference stakes.
- 4. Installation inspection (according to inspection plan as appropriate).
  - A. Actual materials used (Part 512, Subpart D Quality Assurance Activities, 512.33)
  - B. Inspection records
- 5. Facilitate and implement required design modifications with client and original designer
- 6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
- 7. Certification that the installation process and materials meets design and permit requirements.

## **CHECK OUT**

#### **Deliverables**

- 1. As-Built documentation.
  - A. Extent of practice units applied
    - i. Profile and cross section of trench at critical locations.
    - ii. Adequacy of bedding and backfill.
    - iii. Pipe diameters and class or rating.
    - iv. Size and location of appurtenances.
    - v. Dimension and elevation of structures.
    - vi. Results of pressure test if required.
  - B. Drawings
  - C. Final quantities
- 2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03 (c) (1)).
- 3. Progress reporting.

#### REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard Irrigation Water Conveyance High Pressure, Underground, Plastic Pipeline, 430dd
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook

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